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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,777	03/05/2002		Bon-Seuk Goo	P56672	8814
7590 07/06/2006			EXAMINER		
Robert E. Bushnell				PHAN, MAN U	
Suite 300 1522 K Street, 1	٧.W.		ART UNIT	PAPER NUMBER	
Washington, D		05	2616		
				DATE MAILED: 07/06/2000	5

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Anuli adian Na	Applicant(a)					
Office Action Summan		Application No.	Applicant(s)					
		10/087,777	GOO ET AL.					
	Office Action Summary	Examiner	Art Unit					
		Man Phan	2616					
	- The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠	Responsive to communication(s) filed on <u>27 April 2006</u> .							
,	This action is FINAL. 2b) ☐ This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4)🖂	Claim(s) 1-13 and 15 is/are pending in the app	lication.						
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.								
· <u> </u>	Claim(s) <u>1-13 and 15</u> is/are rejected.							
-	Claim(s) is/are objected to.		·					
8)[]	Claim(s) are subject to restriction and/or	r election requirement.						
Applicati	ion Papers							
9)[	The specification is objected to by the Examine	r.						
10)	The drawing(s) filed on is/are: a) acce	epted or b) objected to by the	Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority (	under 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a)ı	a)⊠ All b)□ Some * c)□ None of: 1.⊠ Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s)								
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date.								
2) Notice of Draitsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  6) Other:								

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## Response to Amendment and Argument

- 1. This communication is in response to applicant's 04/27/2006 Amendment in the application of Goo et al. for the "Method for transmitting short message using Internet phones and system therefor" filed 03/05/2002. This application claims Foreign Priority based on the application 2001-54383 filed September 05, 2001 in Republic of Korea. The proposed amendment to the claims and response have been entered and made of record. Claims 14 has been canceled per Applicant's request and claims 1, 5, 9 have been amended. Claims 1-13, 15 are pending in the present application.
- 2. Applicant's amendment to the rejected claims are insufficient to distinguish the claimed invention from the cited prior arts or overcome the rejection of said claims under 35 U.S.C. 103 as discussed below. Applicant's remarks with respect to the pending claims have been fully considered, but they are not persuasive for at least the following reasons.
- 3. Applicant's argument with respect to the rejected claims 1, 5 and 9 (pages 15-16, last paragraph) that the cited reference "does not disclose or suggest transmission of a short message from a user terminal to a short message transmission server". However, Rueger et al. (US#2003/0018806) discloses in Fig. 2 diagram illustrating the inventive telecommunications network capable of conveying messages originating in mobile stations MS1 and MS2 of a first or a second public land mobile network PLMN1, PLMN2 and terminating in the Internet or in an Intranet. As drawn in Fig. 2 the inventive solution is based on the idea of forwarding the

messages from the first service centre SC2 accessed by the mobile stations MS1 and MS2 over a message server WAMS to the second service centre SC1 on a path shown with virtual connections vc1 and vc2. Messages sent by the mobile stations MS1 and MS2 to said virtual mobile stations are forwarded to the message server WAMS where corresponding address information of the recipient application and the service centre SC1 connected thereto is retrieved. Said address information preferably comprises the E.164 address of the service centre SC1 and the address and preferably address type of the recipient application or a related service. Based on the retrieved information the message is forwarded from the message server WAMS to the service centre SC1 ([0042]-[0051]). Rueger also teaches the Short Message Transfer layer protocols, in which SMS-DELIVER for conveying a short message from the service centre SC to the mobile station MS; SMS-SUBMIT for conveying a short message from the mobile station MS to the service centre SC; SMS-COMMAND for conveying a command from the mobile station MS to the service centre SC and SMS-DELIVER-REPORT, SMS-SUBMIT-REPORT, SMS-STATUS-REPORT (See Fig. 4; [0060]-[0064]). In the same field of endeavor, Back et al. (US#2003/0036396) discloses a two-way Short Message Service (SMS) communications between the sender (410) and server (110). The SMS facilitates that a sender sends a short message by using mobile communication service to a recipient, then the recipient can receives the short message. The SMS may be implemented by two ways. The one way is that a sender connects a web site using Internet and transmits a short message to a recipient using mobile communication terminal. The other way is that a sender using mobile communication terminal sends a short message to a recipient using mobile communication terminal (See Fig. 1, [0003]-[0005]). It is assumed that the SMS message being processed is an SS7 transaction capabilities

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application part (TCAP) or mobile application part-based SMS message. However, an SMS control module/server may be used in a non-SS7 environment to process SMS messages that utilize non-SS7 signaling protocols (e.g., SIP, SUA/SCTP, H.323, TALI, etc.). It's noted that telecommunication devices (user equipment) typically communicate with a centralized server, such as a web server, instant messaging (IM) server, or SMS (Short Message Service) server, which performs requested services on behalf of the communications device (user equipment). SMS delivery service provides a mechanism for transmitting "short" messages to and from SMScapable terminals (e.g., wireless handsets, personal computers, etc.) via the signaling component of the wireless communication network. With particular regard to the sending and receiving of SMS messages by a wireless handset, a wireless network provides the transport facilities necessary to communicate short messages between a short message service center (SMSC) and a wireless handset. A short message service center functions as a store and forward platform for short messages. In contrast to earlier text message transmission services, such as alphanumeric paging, SMS technology is designed to provide guaranteed delivery of an SMS message to a destination. That is, if a temporary network failure prohibits the immediate delivery of an SMS message, then the short message is stored in the network (i.e., at an SMSC) until the destination becomes available. Another of the key and distinguishing characteristics of SMS service with respect to previously available message communication services is that an active mobile handset is able to receive or transmit a short message at any time, regardless of whether or not a voice or data call is in progress (two-way SMS). Therefore, the Examiner maintains that the references cited and applied in the last office actions for the rejection of the claims are maintained in this office action.

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## Claim Rejections - 35 USC ' 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 1-5, 7-9, 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rueger et al. (US#2003/0018806) in view of Back et al. (US#2003/0036396).

With respect to claims 1, 9 and 13, 15, Rueger et al. (US#2003/0018806) and Back et al. (US#2003/0036396) disclose a novel system and method for transmitting a short message between Internet phones, according to the essential features of the claims. Rueger et al.

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(US#2003/0018806) discloses in Fig. 4 a flow chart diagram illustrated the message confirmation for communication of the SMS data between the internet phones, in which the short message is forwarded by the service centre SC to a gateway function GMSC which is a function of a mobile services switching centre MSC. The gateway GMSC is capable of interrogating a home location register HLR which contains routing information to the visitor location register VLR. The visitor location register VLR is the functional unit that attends to a mobile station MS operating outside the area of the home location register. A visiting mobile station MS is automatically registered at the nearest mobile services switching centre MSC and the visitor location register VLR is informed accordingly. Based on the retrieved routing information the gateway GMSC forwards the short message to the visited mobile services switching centre MSC. The visited mobile services switching centre MSC retrieves corresponding subscriber information from the visitor location register VLR based on which the short message is forwarded to the mobile station MS. Operations are terminated by returning a delivery report to the service centre SC of the network where the short message has been initiated. ([0010]). Rueger further teaches the message server WAMS where corresponding address information of the recipient application and the service centre SC1 connected thereto is retrieved. Based on the information in the database HLRx of the message server WAMS address data corresponding to the virtual mobile station number is retrieved and used for the forwarding of the message as a new destination address. The message is therefore forwarded to the service centre SC1 whose address has been retrieved from the database HLRX with the destination address of the recipient application or a related service ([0046]-[0065]). It's noted that Control of intercommunication between such an internet phone and a telephone

in a conventional switched circuit network is standardized by the gateway function provided for by ITU Recommendation H.323 protocol. An example of IP telephony gateway is the H.323 gateway (implementing the ITU H.323 standard). H.323 gateways allow interoperation of H.323 systems with other audio/video conferencing systems on Integrated Services Digital Networks (ISDN), plain old telephone systems (POTS), Asynchronous Transfer Mode (ATM), and other transports. An IP telephony gateway operates as an endpoint on the IP-telephony network that provides real-time, two-way communication between IP telephony terminals on the IP-based network and other ITU terminals on a switched-circuit network, or to another IP-telephony gateway. Switched Circuit Network connectivity is achieved in the IP telephony context by using gateways for H.320 (ISDN), H.324, H.323, POTS, and other endpoints on other networks.

In the same field of endeavor, Back et al. (US#2003/0036396) discloses a method and system for receiving data by using the SMS and the wireless Internet. The method comprises the steps of receiving a short message from said service provider, wherein the short message comprises at least a service identifier and site information, determining whether or not there is an application protocol in the site information and executing an IP channel connecting program in correspondence with the application protocol, when the application protocol is in the site information, wherein the data receiving system receives data in correspondence with the application protocol from the service provider by executing the IP channel connecting program (See Figs. 2-3; [0011]-[0013] and [0030]-[0033]). Back et al. (US#2003/0036396) further discloses a two-way Short Message Service (SMS) communications between the sender (410) and server (110). The SMS facilitates that a sender sends a short message by using mobile

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communication service to a recipient, then the recipient can receives the short message. The SMS may be implemented by two ways. The one way is that a sender connects a web site using Internet and transmits a short message to a recipient using mobile communication terminal. The other way is that a sender using mobile communication terminal sends a short message to a recipient using mobile communication terminal (See Fig. 1, [0003]-[0005]).

Regarding claims 3-4, 11-12, Back et al. (US#2003/0036396) further teaches in Fig. 3 a data format illustrated the data field structure of a short message received from the service provider, in which the data field divider 440 may divide the short messages provided by service provider 100 into data fields. For example, the data field divider 440 may divide the short messages into a service identifier field, a first site information field, a second site information field, and similar fields. The service identifier field may store service identifiers. The first site information fields may store a first application protocol, a first URL and similar data. Also, the second site information fields may store a second application protocol, a second URL and similar data. The size of each field may preferably be assigned in advance (See also Fig. 2; [0036]-[0044]).

Regarding claim 5 and 7-8, they are method claims corresponding to the system claims 1, 9 and 3-4, 11-12 above. Therefore, claims 5 and 7-8 are analyzed and rejected as previously discussed with respect to claims 1, 9 and 3-4, 11-12.

One skilled in the art would have recognized the need for communicating short message service between internet phones using H.323 protocol, and would have applied Back's teaching of the executing an IP channel connecting program correspondence with the application protocol into Rueger's novel use of the message server and a telecommunications network for

conveying short message. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Back's method for receiving data using SMS and wireless internet and system thereof into Rueger's method and message server for conveying messages in a telecommunications network with the motivation being to provide a method and system for transmitting a short message in an internet phones.

7. Claims 2, 6, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rueger et al. (US#2003/0018806) in view of Back et al. (US#2003/0036396) as applied to the claims above, and further in view of Pang et al. (US#2003/0043762).

With respect to claims 2, 10, Rueger et al. (US#2003/0018806) and Back et al. (US#2003/0036396) disclose the claimed limitations discussed in paragraph 4 above. However, these claims differ from the claims above in that the claims require the feature wherein the the short message transmission server transmits an ARQ for RAS, and receives an ACF message. In the same field of endeavor, Pang et al. (US#2003/0043762) discloses in Fig. 6 a general flow diagram illustrated the call-making methods, in which the standard H.225 RAS admission request and Q.931 setup procedures are performed. The end terminal, such as a H.323 terminal, transmits a H.225 RAS admission request signal to a GK of the packet data network, which contains the identity of the wireless communication device, such as the phone number of a mobile phone. The GK is able to find the corresponding IP address according to an IP transformation table and responds to the H.323 terminal with an H.225 RAS admission confirmation signal. The H.323 terminal sends, preferably through a GGSN, a Q.931 setup signal to a VMSC in order to establish a voice communication channel. The VMSC in the present

invention communicates with the wireless communication device through a circuit-switched network and communicates with the end terminal through a packet-switched network. Upon receiving a setup signal, the GGSN obtains the PDP context of the identified wireless communication device, such as a mobile phone, according to the IP address identified by a packet received from the H.323 terminal. The GGSN then obtains the GPRS Tunnel ID and SGSN address of the mobile phone from the PDP context and sends the packet to the VMSC. Upon receiving the Q.931 signal, the VMSC responds to the H.323 terminal with a Q.931 call proceeding signal. The VMSC and GK exchange RAS ARQ and Admission Confirmation ("ACF") signals with each other. The VMSC then sends a communication request, in a similar way as illustrated for step 2.3 ([0059]).

Regarding claim 6, it is a method claim corresponding to the system claims 2 and 10 above. Therefore, claim 6 is analyzed and rejected as previously discussed with respect to claims 2, 10.

One skilled in the art would have recognized the need for facilitating the exchange of data between processing units utilizing UTOPIA protocol, and would have applied Pang's teaching of the call set up procedure between VMSC and the packet data network, and Back's teaching of the executing an IP channel connecting program correspondence with the application protocol into Rueger's novel use of the message server and a telecommunications network for conveying short message. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Pang's system and method for providing voice communications for radio network, and Back's method for receiving data using SMS and wireless internet and system thereof into Rueger's method and message server for

conveying messages in a telecommunications network with the motivation being to provide a method and system for transmitting a short message in an internet phones.

## Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Pirkola et al. (US#6,611,516) is cited to show the SMS support over a packet-switched telephony network.

The Allison et al. (US#2003/0083078) is cited to show the methods and systems for preventing delivery of unwanted SMS message.

The Allison et al. (US#2002/0159387) is cited to show the methods and systems for preventing SMS message flooding.

The Ahmavaara (US#7,058,423) is cited to show the service management.

The Skog et al. (US#6,947,738) is cited to show the multimedia messaging service routing system and method.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP '706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (571) 272-3149. The examiner can normally be reached on Mon - Fri from 6:00 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have any questions on access to

the Private PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-9197.

Mphan

July 03, 2006

MAN U. PHAN
PRIMARY EXAMINER